

Wind Chill

A potentially life-threatening and often overlooked killer.

The combination of wind and low temperature in winter can be deadly. The Wind Chill Index helps you determine when dangerous conditions develop that could lead to frostbite or hypothermia. It takes into account heat loss from the human body to its surroundings during cold and windy weather. The calculation utilizes wind speed in miles per hour and temperature in degrees Fahrenheit. For example, a temperature of minus 5 degrees occurring with a 20 mph wind gives a wind chill near minus 30 degrees. This means that your body will lose heat at the same rate as it would if the air temperature were minus 30 degrees with no wind. Wind Chill values near minus 25 degrees mean that frostbite is possible within 15 minutes.

Frostbite is the freezing of skin and the body tissue just beneath it. It first affects exposed body tissue where blood circulation may be limited such as your fingers, toes, nose and ears. To minimize frostbite, make sure all body parts are well covered. When frostbite starts, feeling is lost in the affected area and the frozen tissue will take on a white or pale appearance. If you suspect you are experiencing frostbite, hold the frostbitten area closely against warm skin to return blood flow and warmth to the affected area.

Hypothermia is a dangerously low body temperature and is the most common winter weather killer. When you hear of a hiker, climber, hunter or a stranded traveler perishing from cold weather exposure, hypothermia was the cause. Most people are surprised to learn that hypothermia deaths can occur with temperatures between 30 and 50 degrees. If you or your clothing were wet, then hypothermia becomes even more likely.

Warning signs of hypothermia include uncontrollable shivering, memory loss, disorientation, slurred speech and drowsiness. Immediate medical attention should be given to victims suspected of suffering from hypothermia. If no help is available, the victim should be warmed slowly with warm liquids along with dry clothing and blankets.

The national weather service will issue wind chill advisories and warnings when a deadly combination of wind and cold air threaten. To learn more about wind chill, visit the National Weather Service internet site: weather.gov/om/windchill.

When cold weather threatens, follow these tips for survival:

Stay dry, wet clothing results in much faster heat loss from your body.

Wear waterproof insulated boots.

Stay covered, wear mittens or gloves and wear a hat. At least half of your body heat is lost if your head is not covered.

Dress layered, trapped air between loose fitting clothing helps to insulate.

Stay informed, have a portable NOAA weather radio nearby to keep you up-to-date with the latest forecasts and warnings. Use wind chill temperatures to guide you in dressing properly for the outdoors. On very cold days, minimize your exposure to the outdoors if possible.